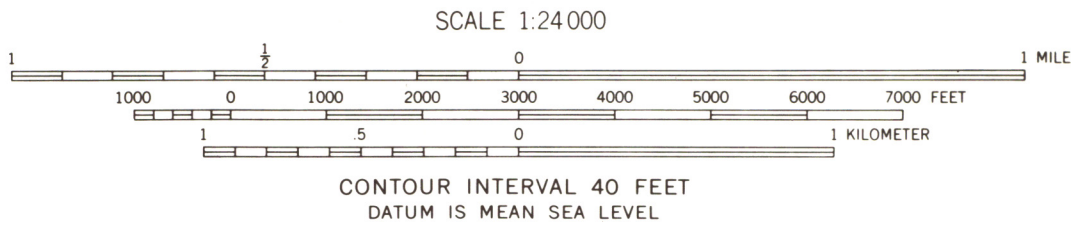


Base from U.S. Geological Survey,  
Gold Bar Canyon 7.5' provisional quadrangle, 1985



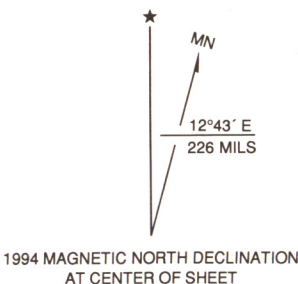
**GEOLOGIC MAP OF THE  
GOLD BAR CANYON QUADRANGLE,  
GRAND COUNTY, UTAH**

by  
**Hellmut H. Doelling, W. Adolf Yonkee,  
and John S. Hand**  
**1994**



1	2	3	1 Jug Rock
			2 Merrimac Butte
			3 The Windows Section
4		5	4 The Knoll
			5 Moab
			6 Mousman Arch
			7 Shafter Butte
6	7	8	8 Through Springs Canyon

ADJOINING 7.5' QUADRANGLE NAMES



Field work: North half by H.H. Doelling, 1983 and 1991;  
South half by J.S. Hand, 1988 and W.A. Yonkee, 1989/1991  
Cartography by J.W. Parker



DESCRIPTION OF MAP UNITS

- Qf** Man-made fill-- Tailings pond, railroad fill, foundation materials; mostly in the Potash area.
- Qa** Alluvium-- Clay, silt, sand, and gravel deposits along the more important active rivers, streams, and washes.
- Qat** Terrace alluvium-- Rounded, moderately sorted gravel (cobbles and pebbles) transported into the area by the Colorado River and deposited at several levels. Contains lenses of finer sand and silt, some of which contain flour gold and magnetite.
- Qac** Mixed alluvial and colluvial deposits-- Poorly sorted mixture of clay, silt, sand, pebbles, angular cobbles, and boulders; coarse clasts consist mostly of sandstone or sandy limestone.
- Qas** Mixed alluvial and eolian deposits-- Sand, silt, and gravel deposits of fluvial origin interspersed with sand and silt of eolian and colluvial origin deposited along less active washes.
- Qea** Mixed eolian and alluvial deposits-- Sand and silt of eolian origin interspersed with minor silt, sand, and gravel of fluvial origin that fills hollows and covers benches on sandstone deposits.
- Qes** Dune and sheet sand deposits.
- Qms** Landslide deposits-- Coherent to broken masses of bedrock units that have moved downslope.
- Qmt** Talus deposits-- Mostly rockfall blocks, boulders, and smaller angular fragments lying on slopes directly below the parent outcrop.
- Jms** Salt Wash Member of Morrison Formation-- Light-yellow-gray, cross-bedded, lenticular, fluvial sandstone interbedded with red and gray mudstone and siltstone; contains conglomeratic sandstone, gritstone, and thin limestone beds. Incomplete thickness is about 220 feet (67 m).
- Jmt** Tidwell Member of Morrison Formation-- Reddish, silty shale or mudstone with interbeds of fine-grained, yellow sandstone and gray concretions. Thickness 50-80 feet (15-24 m).
- Jem** Moab Tongue of Entrada Sandstone-- Light-yellow-gray, fine- to medium-grained, resistant, and massive sandstone, forming impressive bare rock exposures, usually jointed outcrops. Thickness 60-100 feet (18-30 m).
- Jes** Slick Rock Member of Entrada Sandstone-- Orange-red, fine-grained, massive, cliff-forming sandstone, poorly exposed on this quadrangle; outcrops expose only the upper 80 feet (24 m).
- Jn** Navajo Sandstone-- Massive, light-hued, eolian-cross-bedded sandstone; forms cliffs, rounded knolls, and domes; contains local thin, hard, carbonate beds; outcrops expose an incomplete 400-foot (122-m) section on this quadrangle.
- Jk** Kayenta Formation-- Reddish to lavender-gray sandstone with local white and dark-brown beds with thin interbeds of reddish siltstone and mudstone; ledgy, hard bench former; contains local micaceous sandstone and intraformational conglomerate beds. Thickness 220-340 feet (67-104 m).
- Jw** Wingate Sandstone-- Massive, fine-grained, well-sorted sandstone; forms orange to dark-brown prominent cliffs. Thickness 300-400 feet (91-122 m).
- Tc** Chinle Formation-- Reddish-brown, silty, fine-grained, fluvial sandstone interbedded with considerable mudstone and gritstone; locally contains thick-bedded, ledgy, hard sandstone that weathers black, known as the Black Ledge; base contains lenses of white, friable gritstone, mottled siltstone, and lenticular sandstone. Thickness 320-400 feet (98-122 m).
- Tm** Moenkopi Formation-- Brown, evenly bedded, sandy shale and micaceous, silty sandstone; forms smooth slopes interrupted by common thin ledges; commonly ripple-marked sandstone; in southern part of quadrangle a more resistant blocky-appearing unit, the Hoskinnini

Member, is found at the base. Thickness 300-520 feet (91-158 m).

**Pcu** Upper member of Cutler Formation-- Red and maroon, mostly cliff-forming, arkosic sandstone and conglomerate with subordinate sandy mudstone; sandstones are both fluvial and eolian; limestone and calcareous mudstone marker (m) mapped in middle of unit in southern part of the quadrangle. Thickness 700-1,000 feet (213-305 m).

**Pcl** Lower member of Cutler Formation-- Same as upper Cutler member, but contains a series of thin, fossiliferous, gray limestone beds or partings; represents part of former Elephant Canyon interval. Thickness 180-220 feet (55-67 m).

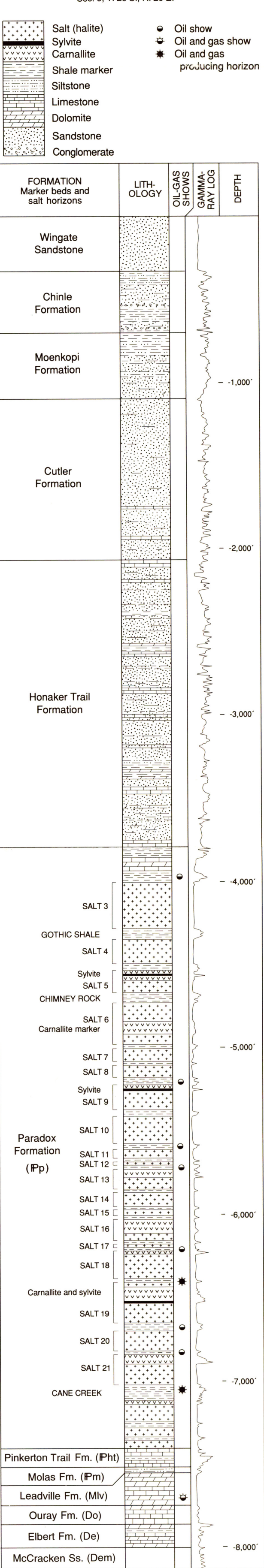
**Ph** Honaker Trail Formation-- Fossiliferous, gray limestone, cherty limestone, limy mudstone, yellow and purple siltstone, and thick arkosic sandstone, generally cliff-forming. Upper 240 feet (73 m) of 1,600-2,100 feet (488-640 m) exposed; remainder determined from well logs.

MAP SYMBOLS

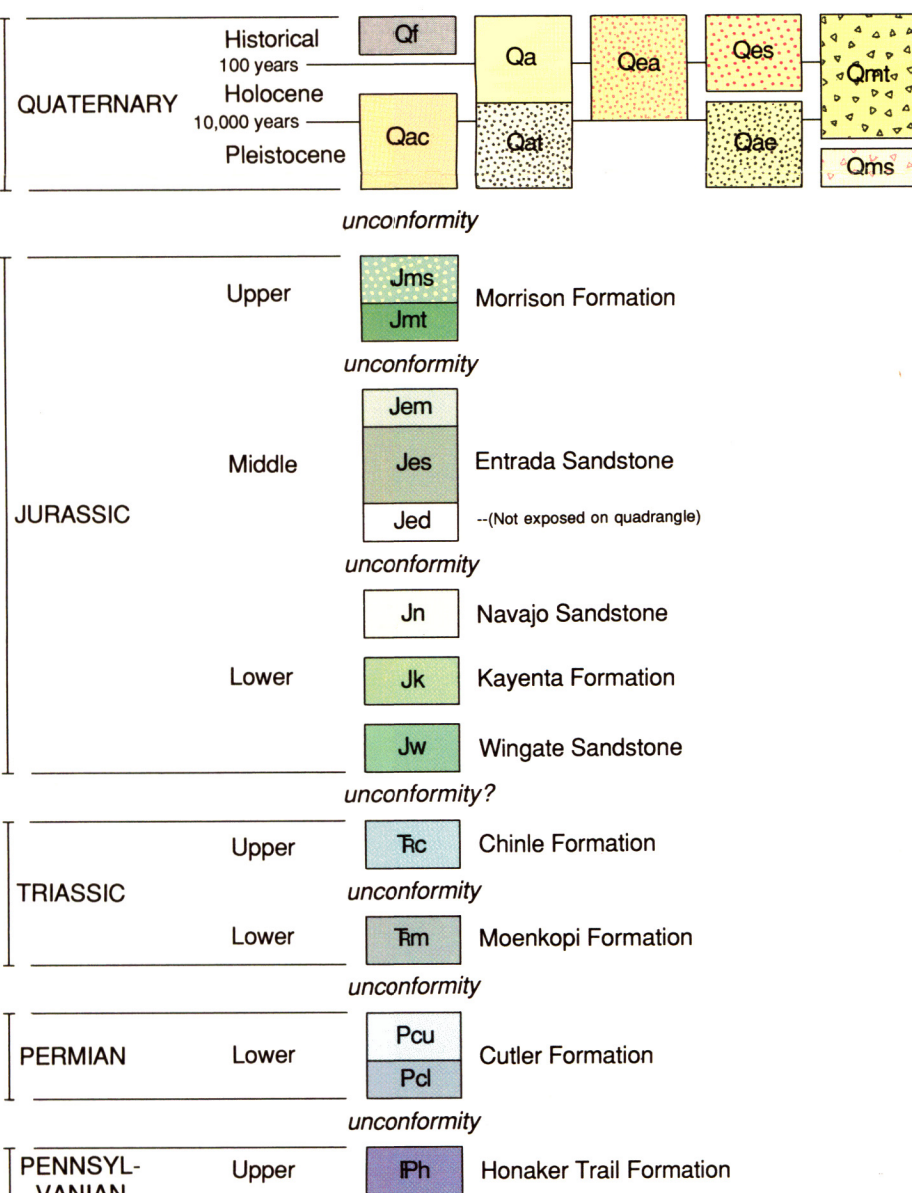
- Contact-- Dashed where location inferred.
- Fault-- Dashed where inferred, dotted where covered; bar and ball on downthrown side.
- Fracture zone
- Trace of axial surface of fold-- Arrows show direction of plunge; dashed where inferred, dotted where covered. Structure contours drawn on base of Wingate Sandstone. Contour interval, 200 feet (60 m).
- Anticline
- Syncline
- Strike and dip of bedding
- Strike of nearly vertical joints
- Oil and gas well
- Oil well
- Dry hole
- Shut-in oil well
- Uranium mine adit
- Prospect
- Qes/Qac Stacked map units-- Indicate thin or discontinuous cover of one unit over another unit.

LOG OF SOUTHERN NATURAL GAS

Long Canyon No. 1  
Sec. 9, T. 26 S., R. 20 E.



CORRELATION OF MAP UNITS



LITHOLOGIC COLUMN

